ENGINEERING OPERATIONS COMMITTEE
MEETING MINUTES
SEPTEMBER 6, 2007 – 1:00 P.M.
MULTI-MODAL CONFERENCE ROOM

Present:	L. Tibbits	J. Polasek	B. O'Brien
	J. W. Reincke	M. Van Port Fleet	J. D. Culp
	T. Anderson	C. Roberts	T. Fudaly
	C. Bleech	E. Burns	
Absent:	J. Friend		
Guests:	J. Townsend	M. Bott	K. Kennedy
	M. DeLong		

OLD BUSINESS

1. **Approval of the July 12, 2007, Meeting Minutes – L. Tibbits**

   The July 12, 2007, meeting minutes were approved electronically on August 9, 2007.

NEW BUSINESS

1. **Sight Distance Guidelines – M. Bott and I. Gedaoun**

   This item is withdrawn.

2. **Revisions of Eight Geometric Design Guides – M. Bott and J. Townsend**

   Eight geometric design guides were updated to reflect changes in the *2004 AASHTO - A Policy on Geometric Design of Highways and Streets*, and current department practices. English and metric guides were combined, urban and rural guides were combined for entrance ramps, and a 75 mph design speed was added to the appropriate tables. Some requirements were changed to reflect current AASHTO standards. The Traffic and Safety Division, Design Division, Traffic Recommendations Committee and regions were involved in the revision process. The following guides were revised:

   GEO-100-E One Lane Tapered Entrance Ramp (Dual Units)
   GEO-101-E One Lane Parallel Entrance Ramp (Dual Units)
   GEO-110-A Two Lane Entrance Ramp (Dual Units)
   GEO-120-A Successive Entrance Ramps (Dual Units)
   GEO-340-A Parclo A-B-2-Quad (Dual Units)
   GEO-350-A Trumpet Type Interchange (Dual Units)
   GEO-360-A Cloverleaf Type Interchange (Dual Units)
   GEO-640-A Turned-In Roadways (Dual Units)

   ACTION: The EOC approves the revised geometric design guides.

3. **2007 Edition of the *Guidelines for Administering Warranties on Road and Bridge Construction Contracts* – K. Kennedy and D. Pawelec**

The Statewide Warranty Administration Team developed the *Guidelines for Administering Warranties on Road and Bridge Construction Contracts* in 2002 to provide consistency in the administration of warranty projects. In 2007, a team was formed to update the guidelines to current department practices and procedures. The 2007 edition of the guidelines includes updated inspection forms, a Warranty Decision Tree, and references to the new Statewide Warranty Administration Database. The 2007 edition replaces the 2002 edition, and all holders of the 2002 edition on record with MDOT's Publication Office will receive a copy of the revised guidelines.

ACTION: The EOC approves the revised guidelines. A Bureau of Highways instructional memorandum will introduce the revised guidelines, which will take effect on the date of the instructional memorandum.

4. **Appeal Process for Billboard Vegetation Removal Requests – M. DeLong**

The 2006 amendments to the Highway Advertising Act provide specific requirements for MDOT regarding the permitting of the removal of vegetation from in front of billboards. One of the requirements is that MDOT provide an appeals process for denied or modified applications. MDOT developed an appeals process based on the current contractor claims procedure. Two levels of appeals will be available for the applicant: the Region Review and the Central Office Review. The Region's real estate liaisons, the Bureau of Highways-Development Director, and the Attorney General's Office approved the new process.

ACTION: The EOC approves the new procedure, with minor modifications. The new procedure will be incorporated into the *Highway Advertising Manual*. A Bureau of Highways instructional memorandum will introduce the new procedure.

5. **Medium Volume Hot Mix Asphalt Ultra-Thin – C. Bleech, Pavement Committee**

Hot mix asphalt (HMA) ultra-thin overlay is a preventative maintenance treatment used to extend pavement service life without significantly improving the pavement structural capacity. Low volume HMA ultra-thin overlay, where commercial average daily traffic (ADT) is less than 380, is a standard preventative maintenance fix in the pavement sealing category. Medium volume HMA ultra-thin overlay, where the commercial ADT is between 380 and 3,400, is currently part of MDOT's Capital Preventative Maintenance (CPM) Emerging Technology Program. An emerging technology is a fix that is considered promising, but whose performance and cost effectiveness is unproven. The medium volume overlays have been in the Emerging Technology Program since 1999. The Pavement Committee has concluded that there is enough evidence to move the medium volume HMA ultra-thin overlay from the Emerging Technology category to the pavement sealing category for flexible and composite pavement as a standard fix in the CPM program.

ACTION: The EOC approves the request to move the medium volume HMA ultra-thin overlay from the Emerging Technology category to the pavement sealing category for flexible and composite pavement as a standard fix in the CPM program.

6. **Pavement Selection: I-75 Reconstruction – CS 82191, JN 55663 – B. Krom**

The reconstruction alternates considered were a hot mix asphalt (HMA) pavement (Alternate 1 – equivalent uniform annual cost [EUAC] $199,832/directional mile) and a jointed plain concrete pavement (Alternate 2 - EUAC $153,331/directional mile). A life cycle cost analysis was performed and Alternate 2 was approved based on having the lowest EUAC. The pavement design and cost analysis are as follows:

12.5”.....Jointed Plain Concrete Pavement w/16’ jt spacing (mainline & outside shoulder)
9”.....Jointed Plain Concrete Pavement w/16’ jt spacing (inside shoulder)
16”.....Open Graded Drainage Course (mainline & outside shoulder)
19.5”.....Open-Graded Drainage Course (inside shoulder)
Geotextile Separator
6” dia.....Open-Graded Underdrain System
28.5”.....Total Thickness

Present Value Initial Construction Cost	$1,298,729/directional mile
Present Value Initial User Cost	$1,329,897/directional mile
Present Value Maintenance Cost	$112,447/directional mile
Equivalent Uniform Annual Cost	$153,331/directional mile

(Signed Copy on File at C&T)
Brenda J. O’Brien, Secretary
Engineering Operations Committee

BJO:kar

cc:

K. Steudle	S. Mortel	J. Steele (FHWA)
J. Shinn	D. Jackson	R. Brenke (ACEC)
L. Hank	W. Tansil	G. Bukoski (MITA)
EOC Members	D. Wresinski	D. DeGraaf (MCPA)
Region Engineers	C. Libiran	D. Hollingsworth (MCA)
TSC Managers	R. J. Lippert, Jr.	J. Becsey (APAM)
Assoc. Region Engineers	T. L. Nelson	M. Newman (MAA)
T. Kratofil	T. Phillips	J. Murner (MRPA)
M. DeLong	K. Peters	G. Naeyaert (ATSSA)
B. Shreck	J. Ingle	C&T Staff